USSR / General Biology. Individual Development. Embryonal Development. B-2

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 61891

Author : Chanturishvili, P. S.
Inst : Institute of Zoology, AS GSSR
Title : "Classical" Experimental Study of Embryonal Eye Development in Vertebrates.

Orig Pub : Tr. In-ta zool. AN GruzSSR, 1956, 15, 299-317

Abstract : After a short report on the history of contemporary points of view with regard to the development of eyes, the author critically reviews the generally accepted position of eyecup and lense development by referring as an example to the eye development in Rana retibunda. He assumes that the matter of which retina and ectodermal epithelium are formed after the neutral lamina passes the phase of closed cylinders, are of the same origin. This point of view categorically

Card 1/2

Abs Jour : Ref Zhur - Bio.., No 14, 1958, No 61891

contradicts generally accepted notions which maintain that primary optic vesicles grow into the epidermal epithelium. In batrachians eyecup and lense matter is covered by external layers of ectodermal epidermis, whereas in caudatae it is to be found on the surface. Indications that this matter separates into crystal and retinal parts become apparent as pigment strata form between them and separate the lamina, which consists of cells situated within the same layer, from the common fold. This then becomes the matter which forms the future crystalline lens. There is no complete separation between crystalline and retinal parts. They remain connected with each other by thin fibers. -- Ye. A. Baburina.

CHANTURISHVILI, P.S.

Extrauterine pregnancy in mice. Soob. AN Gruz.SSR 18 no.4:463-466 Ap '57. (MLRA 10:7)

1. Akademiya nauk Gruzinskoy SSR, Institut zoologii, Tbilisi. Predstavleno pochetnym akademikom V.V. Voroninym.
(Pregnancy, Extrauterine)

CHANTURISHVILI, P.S.

Experiments on uterine resorption of embryos in laboratory mice.
Trudy Inst. zool. AN Gruz. SSR 16:261-264 '58. (MIRA 11:12)
(Fetus, Death of) (Antibiotics)

CHANTURISHVILI, P. S.

"On the checking of the results of the causal-analytical investigation of the development of the crystalline lens".

report presented at a Joint Session of the Biological Dept. of AN USSR and Biological and Medical Depts. AN Gruziya SSR, Tbilisi, 28 Sept - 3 Oct 1957. Vestnik Akad. Nauk SSSR, 1958, Vol. 28, No. 1, pp. 121-125. (author Dzidzishvili, N. N.)

CHANTURISHVILI, P.S.

Changes in the formative layer of a cataractous crystalline lens in mice under experimental condtions. Trudy Inst. zool. AN Gruz. SSR 17:183-206 '60. (MIRA 13:11)
(Cataract) (Crystalline lens) (Regeneration (Biology))

CHANTURISHVILI, Pavel Sioyevich

[Embryology of animals; preembryonal ontogenesis] [Embriologiia zhivotnykh; predembrional'nyi ontogenezis. Tbilisi, Gos.izd-vo "TSodna"] 1963. 236 p. [In Georgian]
(MIRA 17:4)

CHANTURIYA, A., inzh.

Concrete blocks with numerous hollows and interior waterproofing. Stroitel' no.5:6 My '61. (MIRA 14:6)
(Blocks) (Waterproofing)

CHANTURIYA, A. A.

Cand Tech Sci - (diss) "Erection of the underground part of edifices of large hollow blocks under conditions of the Georgian SSR." Tbilisi, 1961. 28 pp with diagrams; (Georgian Polytechnic Inst imeni V. I. Lenin); 200 copies; price not given; (KL, 7-61 sup, 248)

L 10725-63 EWA(k)/EWT(1)/FBD/T-2/EDS/3W2/EEC(b)-2/EWG(t)-2 AFTC/
ASD/ESD-3/RADC/APGC/AFWL Pl-4/Po-4 LJP(C)/WG/K/JHB/EH
ACCESSION NR: AP3003155 S/0056/63/044/006/2180/2182 85

AUTHOR: Askar'yan, G. A.; Prokhorov, A. M.; Chanturiya, G. F.; 81
Shipulo, G. P.

TITLE: Laser 35 beam in liquid

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 2180-2182

TOPIC TAGS: laser effects, photohydraulic effects, laser beam in liquid

ABSTRACT: An experimental study of the effects of focused and unfocused laser beams on liquids had been carried out. A ruby laser with a beam pulse duration of approximately 1 microsec was used. Bubble formation due to focused and unfocused beams was observed and photographed in water. In ordinary tap water the formation of bubbles ceased with decreased beam intensity, while in gassed water no such decrease was observed. Special control experiments showed that light scattering

Card 1/2

L 10725-63

ACCESSION NR: AP3003155

3

takes place on the bubbles and not on inhomogeneities in the liquid. The size of the bubbles and the light scattering parameters were calculated. An oscillographic study of the scattering process showed that scattering changes in time and that the scattering centers increase the scattering effect. Photohydraulic effects occurring during focusing of the beam near or on the surface of a plate immersed in liquid were noted. Explosive local boiling, downward and upward motion of the plate, changes in the nature of the orifice drilled in the plate by the beam, rupturing of the vessel by shock waves, and ejection of liquid from the impact area were also observed. Increases in the absorption of light by the water, brought about through addition of copper sulfate, led to a sharp increase in the intensity of photohydraulic effects. The height of the ejected stream reached one meter, and in some cases almost all the water was ejected from the vessel. "In conclusion the authors express their gratitude to V. S. Zuyev and V. K. Konyukhov for participation in the preliminary experiments with gassed liquids conducted in the summer of 1962."
Orig. art. has: 2 formulas.

Card 2/3 2

Physics Inst. Academy of Sci.

L 34849-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5008547 S/0286/65/000/006/0061/0061

AUTHOR: Gverdtsiteli, I. M.; Ugrekhelidze, D. Sh.; Chanturiya, M. D.

TITLE: A method for producing organometallic polymers. Class 39, No. 169247

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 61

TOPIC TAGS: formaldehyde resin, resol, organo metallic compound, organoelemental polymer

ABSTRACT: This Author's Certificate introduces a method for producing organometallic polymers based on phenolformaldehyde resols by [illegible] metal compounds. A wider selection of hardeners is provided by [illegible] titanium compounds, e.g. titanium tetrachloride, as well as [illegible] plete hydrolysis and alcoholysis of this compound.

ASSOCIATION: none

SUBMITTED: 16Jun61 ENCL: 00 SUB CODE: MT, OC

NO REF SOV: 000 OTHER: 000

Card 1/1

CHANTURIYA, N.N.; NISHNIANIDZE, N.O.

Testing new fungicides against apple powdery mildew. Soob. AN Gruz. SSR 35 no.3:669-674 S '64.

(MIRA 17:11)

1. Gruzinskiy institut zashchity rasteniy. Predstavleno akademikom L.A. Kanchaveli.

CHANTURIYA, N. [N.]

Eristavi, Ye. and Chanturiya, N. "Virus disease of the Georgian mulberry tree," Trudy In-ta zashchity rasteniy, (Akad. nauk Gruz. SSR), Vol. V, 1948, p. 149-51, - Bibliog: 15 items

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

1. CHANTURIYA, N. N., KIKACHEYSHVILI, Z. N.

2. USSR (600)

7. "Results of Preliminary Experiments in the Chemotherapy and Artificial Immunization of Lemons ('Mal'secco')", Trudy In-ta Zashchity Rasteniy AN Gruz. SSR (Works of the Institute of Plant Protection, Acad Sci Georgian SSR), Vol 7, 1950, pp 51-56.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

CHANTURIYA, N.M.; KAKULIYA, M.A.

Biological control of Armillaria mellea Quel., the root rot causing agent in mulberry trees. Soob.AN Grus.SSR 14 no.4:239-246 '53. (MLRA 7:3)

1. Akademiya Nauk Gruzinskoy SSR. Institut zashchity rasteniy, Tbilisi. (Mulberry--Diseases and pest) (Root rot) (Armillaria mellea--Biological control)

USSR / Cultivated Plants. Subtropical and Tropical Plants. M-8

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73190.

Author : Chanturiya, [N.N.]
Inst : Not given.
Title : Some Advantages of Cultivating Scion-Rooted Orange Trees in Comparison with Those Grafted.

Orig Pub: Sakartveloa kolmeurne, 1957, No 6, 27.

Abstract: At the experimental-production base of the Kutaisskiy Agricultural Institute in Yesheri village (Abkhazskaya ASSR), the majority of 230 scion-rooted orange trees raised developed stronger growth, better frost resistance, resistance to fungi diseases and pests, higher harvest yield and better fruit quality. During the severe frosts of the winter

Card 1/2

USSR / Cultivated Plants. Subtropical and Tropical Plants. M-8

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73190.

Abstract: of 1949-50 scion-rooted orange trees survived the winter much better than those grafted on frost-resistant scions. The latter showed weak growth - 5-6 m, while the scion-rooted trees reached heights of 14-15 m. Scion-rooted orange trees gave 8-9 thousand fruit per tree, but grafts very rarely reached such a harvest. Quality of fruit in scion-rooted trees was also higher. -- D. I. Tabidze.

Card 2/2

CHANTURIYA, N.N.

Investigation of metabolism in mulberry leaves affected by the bacteriosis - Pseudomonas mori (Boyer et Lambert) Stev. Soob. AN Gruz.SSR 21 no.3:305-312 S '58. (MIRA 12:4)

1. Akademiya sel'skokhozyaystvennykh nauk GruzSSR i Institut zashchity rasteniy, Tbilisi. Predstavleno akademikom L.A. Kanchaveli.
(Mulberry--Diseases and pests)

CHANTURIYA, N.N.

Establishing control measures against mulberry bacteriosis. Soob. AN Gruz. SSR 29 no.5:579-586 N '62. (MIRA 18:3)

1. Institut zashchity rasteniy, Tbilisi. Submitted October 15, 1961.

CHANTURIYA, N.N.; LABAKHUA, L.V.

Use of antibiotics against mulberry bacteriosis. Soob. AN Gruz. SSR 32 no. 1:141-148 O '63. (MIRA 17:9)

1. Institut zashchity rasteniy Gruzinskoy SSR. Predstavleno akademikom L.A. Kanchaveli.

CHANTURIYA, N.N.; OVANESYAN, T.T.

Effect of phytobacteriomycin on the mulberry silkworm. Soob. AN Gruz. SSR 34 no.3:645-650 Je '64 (MIRA 18:1)

1. Gruzinskiy institut zashchity rasteniy. Submitted December 3, 1963.

CHANTURIYA, N.N.

Effectiveness of new fungicides against the powdery mildew of mulberry. Soob. AN Gruz. SSR 36 no.3:655-661 D '64.
(MIRA 18:3)

1. Gruzinskiy institut zashchity rasteniy. Submitted March 9, 1964.

L 64443-65

ACCESSION NR: AP5016426 UR/0251/65/038/003/0637/0644

AUTHOR: Chanturiya, N. N. 15 13

TITLE: A study of mulberry powdery mildew in Georgian SSR

SOURCE: AN GruzSSR. Soobshcheniya, v. 38, no. 3, 1965, 637-644

TOPIC TAGS: plant disease, microspore, plant ecology

ABSTRACT: The discovery of mulberry powdery mildew in Georgian SSR in 1957 prompted a 4 yr study (1957-61) in its various mulberry regions to determine the causative agent of the disease. Microscopic investigations revealed that the only causative agent is an ascomycete fungus known as Phyllactinia suffulta sacc., known in its conidial form as Ovulariopsis moricola Delacroix. Special experiments and investigations under field conditions show that the cleistocarps mature only the year after wintering, and the perithecium matures slowly. Optimal conditions are 18-20° and intermittent moisture. The fruit body parts of the fungus do not mature all at the same time, with the process often taking 30-35 days. The cleistocarps on fallen leaves mature 7 to 10 days earlier than on runners of plants,

Card 1/2

L 64443-65
ACCESSION NR: AP5016426

which may be attributed to moisture of the soil surface. Release of ascospores from the wintered cleistocarps generally starts in the latter part of July and continues through the middle of August. The number of ascospores released during this period varies depending on ecological conditions. The released ascospores infect leaves by air flow or by rain drops with powdery mildew appearing 12-14 days after initial infection. The conidial spores which form during the appearance of powdery mildew are sources of new infections. Conidial spores do not survive the winter well and are highly sensitive to various external factors such as high temperature and low humidity. Experiments show that Phyl. suffulta sacc. is a highly specialized causative agent affecting only the mulberry. Orig. art. has: 1 figure.

ASSOCIATION: Gruzinskiy institut zashchity rasteniy (Georgian Institute of Plant Protection)

SUBMITTED: 15Jan65 ENCL: 00 SUB CODE: LS

NR REF SOV: 007 OTHER: 002

Card 2/2

CHANTURIYA, O.D.

Aromatic substances in the green tea leaf. Biokhim.chain.proizv. no. 2:167-175 '59. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut chaynoy promyshlennosti, Anaseuli.
(TEA) (ESSENCES AND ESSENTIAL OILS)

CHANTURIYA, T.I.

Use of hibernation in combination with local anesthesias in surgery. Sbor. trud. Med. nauch. ob-vo Abkh. 2:55-60 '59. (MIRA 14:10)

1. Iz khirurgicheskogo otdeleniya (zav. - kand.med.nauk D.S.Papaz'yan) Sukhumskoy zheleznodorozhnoy bol'nitsy (glavnyy vrach T.I.Chanturiya).
(ARTIFICIAL HIBERNATION) (LOCAL ANESTHESIA)

POL'KIN, S.I., prof.; ANDREYEV, P.I.; CHANTURIYA, V.A.

Flotation for the separation of pyrochlore, zircon and ilmenorutile. Obog. rud. 8 no.3:20-24 '63. (MIRA 17:1)

POL'KIN, S.I. (Moskva); PLAKSINA, L.D. (Moskva); CHANTURIYA, V.A. (Moskva)

Effect of emulsifying and of oxygen on the properties of oleic acid as collector in the selective flotation of phyrochlore-zircon concentrates. Izv. AN SSSR. Met. i gor. delo no.5: 154-158 S-O '63. (MIRA 16:11)

PLAKSIN, I.N.; SHAFEYEV, R.Sh.; CHANTURIYA, V.A.

Electrochemical surface properties of ilmenite, rutile, and ilmenorutile as interrelated with their flotation characteristics. Dokl. AN SSSR 152 no.6:1405-1407 O '63. (MIRA 16:11)

1. Institut gornogo dela im. A.A. Skochinskogo. 2. Chlen-korrespondent AN SSSR (for Plaksin).

PLAKSIN, I.N. (Moskva); SHAFEYEV, R.Sh. (Moskva); CHANTURIYA, V.A. (Moskva)

Influence of halogen anions on the state of the emulsion of oleic acid under flotation conditions. Izv. AN SSSR. Met. i gor. delo no.6:186-187 N-D '64. (MIRA 18:3)

PLAKSIN, Igor' Nikolayevich; SHAFEYEV, Rafael' Sharifovich; CHANTURIYA, Valentin Alekseyevich; VASIL'YEV, B.K., red.

[Effect of the surface heterogeneity of minerals on their interaction with flotation reagents] Vliianie geterogennosti poverkhnosti mineralov na vzaimodeistvie s flotatsionnymi reagentami. Moskva, Nauka, 1965. 49 p.
(MIRA 18:4)

PLAKSIN, I.N.; SHAFEYEV, R.Sh.; CHANTURIYA, V.A.

Characteristics of the fixing of oxygen treated oleic acid on the surface of rutile and zircon. Izv. vys. ucheb. zav.; tsvet. met. 8 no.1:18-20 '65. (MIRA 18:6)

1. Institut gornogo dela imeni Skochinskogo.

L 26109-66 EWT(1)
ACC NR: AP6015093 SOURCE CODE: UR/0020/66/168/001/0152/0153

AUTHOR: Plaksin, I. N. (Corresponding member, AN SSSR); Bruns, S. A.; Chanturiya, V. A.; Shafeyev, R. Sh.

ORG: none

TITLE: The influence of the frequency of an electric field on the optical and structural properties of water

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 152-153

TOPIC TAGS: electric effect, electric field, irradiation effect, irradiation intensity

ABSTRACT: The experiments were performed to study the effect of electric field frequency on the intensity of light extinction caused by water. The test tubes used had a capacity of 25 cubic centimeters. Two electrodes made of brass foil were fixed to the tube from the outside. A GSS-6 standard signal generator was used for irradiation. The frequency of the current was varied from 100 kcps to 26 Mcps. Duration of irradiation was 30 min. The intensity of extinction was measured on a special installation consisting of a UM-2 universal monochromator, an excitation source (a 12-volt incandescent lamp), and an FEU-29 photomultiplier. The photocurrent of the photomultiplier was recorded by a sensitive galvanometer. The monochromator could determine extinction intensity caused by water within a range from 380

Card 1/2 UDC: 546.212

L 26109-66

ACC NR: AP6015093

0

to 691 mμ. Measurements were made of the spectral distribution of transmission intensity of light through an empty vessel and a vessel filled with water. The difference between these intensities gives the intensity of the light extinction caused by the water. The dependence of the extinction intensity on the electric field intensity was of two types. In the frequency range from 100 kcps to 8 Mcps in some cases a decrease in extinction intensity with regard to the untreated water was observed while in other cases an increase in extinction intensity was observed. The double character of the dependence of light extinction can be attributed to the superimposition of the influence of the electric field on the effects of different external fields present in the water which are caused by solar radiation, radiowaves, and other external electromagnetic fields. The change in the light extinction caused by the water can result from either the change in light absorption or the change in light dispersion. In both cases the structural conditions of the water are changed. Electric fields of various frequencies cause the structure of the water to change through a disturbance of the natural oscillation frequency of the water's molecules. Orig. art. has: 1 figure. [JA]

SUB CODE: 20/ SUBM DATE: 23Nov65/ OTH REF: 002/ ATD PRESS: 4153

Card 2/2

L 41707-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JW/JG

ACC NR: AP6019534 (A) SOURCE CODE: UR/0020/66/168/004/0864/0866

AUTHOR: Plaksin, I. N. (Corresponding member AN SSSR); Shafeyev, R. Sh.; Chanturiya, V. A.

ORG: Mining Institute im. A. A. Skochinskiy (Institut gornogo dela)

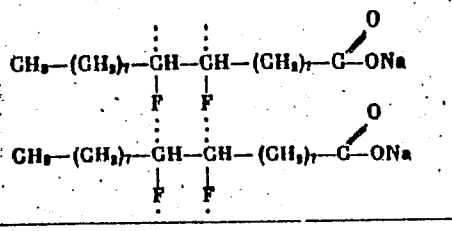
53

TITLE: Nature of interaction between sodium fluoride and oleic acid during floatation separation of titanium and zirconium ores

SOURCE: AN SSSR. Doklady, v. 168, no. 4, 1966, 864-866

TOPIC TAGS: IR spectrum, sodium compound, titanium oxide, zirconium compound, floatation, oleic acid

ABSTRACT: A method of separating zirconium and titanium ores by means of selective precipitation of zirconium oxide from the mixed ores during floatation is described. The method is based on the selective reaction of sodium fluoride with oleic acid absorbed on zirconium oxide resulting in the formation of an organic polyfluoride

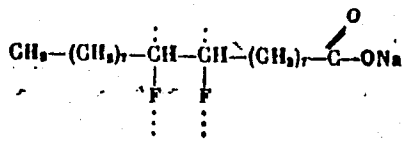


Card 1/2

UDC: 547.397

L 41707-66

ACC NR: AP6019534



which then precipates. The zirconium oxide is recovered from the precipitate by treatment with concentrated H_2SO_4 at pH=2-3. The optimum quantity of sodium fluoride was found to be equal to 250-300 grams per ton of mixed ore. By this procedure, one obtains a titanium concentrate containing 84.9% TiO_2 and a zirconium concentrate containing 62.0% ZrO_2. It is suggested that the method can be employed generally in the separation of nonsulfide type ores. The IR spectra of the oleic acid on mineral surfaces before and after treatment with sodium fluoride are given. Orig. art. has: 2 figures, 1 formula.

SUB CODE: 07,11/ SUBM DATE: 09Nov65/ ORIG REF: 003/ OTH REF: 001

Card 2/2

ANDRONIKASHVILI, E.L., akademik; BUDA, B.G.; DEVNOZASHVILI, D.S.; KIKNADZE, G.I.; KITSMARISHVILI, E.S.; TOPSHYAN, L.S.; CHANTURIYA, V.M.

Low-temperature loop of an IRT-2000 reactor. Soob. AN Gruz. SSR 34 no.1:45-52 Ap '64 (MIRA 17:7)

1. AN Gruzinskoy SSR (for Andronikashvili).

KIKNADZE, G.I.; GAMBARYAN, V.G.; LITVINOV, B.I.; LYUDVIGOV, R.B.;
RAZMADZE, Z.G.; FEL'DMAN, L.I.; CHANTURIYA, V.M.

Indium-gallium radiation loop for pool reactors. Atom. energ.
19 no.2:176-177 Ag '65. (MIRA 18:9)

L 5071-66 EWT(m)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/DM

ACC NR: AP5022636 UR/0089/65/019/002/0176/0177

621.039.573

AUTHOR: Kiknadze, G. I.; Gamberyan, V. G.; Litvinov, B. I.; Lyudvigov, R. B.; Razmadze, Z. G.; Fel'dman, L. I.; Chanturiya, V. M.

TITLE: Indium-gallium radiation loop for pool-type reactors

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 176-177

TOPIC TAGS: nuclear research reactor, gamma radiation

ABSTRACT: An abbreviated description of a special indium-gallium loop used in the IRT-2000 research reactor is given. The reactor is operated by the Institute of Physics of the Gruzinskaya SSR Academy of Sciences. The loop does not require a special biological shielding and can be easily manipulated and adjusted to other pool-type reactors. The changes in gamma dose rates are obtained by a translational displacement of the loop frame. The radioactive In^{116} nuclei are generated by leakage neutrons. A radioactivity equivalent to 16 g of radium can be created at a 1000 kw capacity. Thus, a gamma dose rate of about

Card 1/2

L 5071-66

ACC NR: AP5022636 O

0.85 x 10^6 roentgen per hour can be produced in a 10.5 liter irradiated volume. By experimenting with a 5000-kw reactor of IRT-type, the authors proved that it is possible to obtain a source of gamma radiations equivalent to those obtained from 1 x 10^6 to 1.5 x 10^6 grams of radium. The immersion of the loop assembly in the reactor tank is shown in a photo.

ASSOCIATION: none

SUBMITTED: 14Apr65 ENCL: 00 SUB CODE: NP

NO REF SOV: 000 OTHER: 000

Card 1/2

SKOPETS, Z.A. (Yaroslavl'); OSTROVSKIY, A.I. (Moskva); BESKIN, L.N. (Moskva); BALK, M.B. (Smolensk); BORSUK, M.V. (L'vov); BYKOV, A.M. (Baku); CHANTURIYA, Z.A. (Tbilisi); NOVIKOVA, V.S. (Orekhovo-Zuyevo); DUBNOV, Ya.S. (Moskva); STECHKIN, S.B. (Moskva); KHAVIN, L.P. (Leningrad); ERDNIYEV, P., (Stavropol'); CHIAREULI, D.L. (GrúzSSR); ASEKRITOV, U.M. (Yaroslavl'); GOLUBEV, V.A. (Kuvshinovo); MALININ, V.V. (Leningrad); DAVYDOV, U. (Gomel'); ROZENBERG, V.I. (Leningrad); TIKHONOV, P.G. (Karaganda); ROMANCHUK, N.A. (Khar'kov); MIKLOS, R.A. (Moskva); OGAY, S.V. (Frunze); ROFE-BEKETOV, F.S.; BERSHTEYN, A. (Moskva); ARLAZAROV, V.L. (Moskva)

Solutions to problems. Mat.pros. no.4:253-270 '59.

(MIRA 12:11)

(Mathematics--Problems, exercises, etc.)

CHANTURIYA, Z.A.

Some properties of biorthogonal systems in Banach spaces and their application in spectral theory. Soob. AN Gruz. SSR 34 no.2:271-276 My '64. (MIRA 18:2)

1. Tbilisskiy gosudarstvennyy universitet. Submitted June 24, 1963.

CHANTURIYA, Z.A.

Some properties of T bases. Soob. AN GruzSSR 37 no.2:271-274 F '65.
(MIRA 18:3)

1. Tbilisskiy gosudarstvennyy universitet. Submitted April 22, 1964.

CHANTURIYA, Z.A.

P.L. Ul'ianov's problem. Soob. AN Gruz. SSR 38 no. 3: 527-528 Je '65. (MIRA 18:12)

1. Tbilisskiy gosudarstvennyy universitet. Submitted Jan.10,1965.

LOBANOV, Ye.M.; CHANYSHEV, A.I.; CHANYSHEVA, T.I.

Use of activation analysis in determining the scandium content in rocks. Izv. AN Uz.SSR. Ser.fiz.-mat.nauk 9 no.3:66-68 '65.

Quantitative determination of fluorine in fluorite ores and their derivatives by the activation method using a polonium-beryllium neutron source. Ibid.: 68-69.

(MIRA 19:1)

1. Institut yadernoy fiziki AN UzSSR. Submitted February 17, 1964

CHANYSHEV, S.M.; ZGAYEVSKIY, V.E.

Temperature dependence of a chemical potential. Izv.vys.ucheb.zav.; fiz. no.4:127-134 '58. (MIRA 11:11)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva.
(Semiconductors)

SMIRNOV, A.M., aspirant; CHANYSHEV, Z.G.

Use of gases for controlling bee moths. Veterinariia 42 no.11:97-98 N '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy sanitarii (for Smirnov). 2. Bashkirskaya nauchno-proizvodstvennaya veterinarnaya laboratoriya (for Chanyshev).

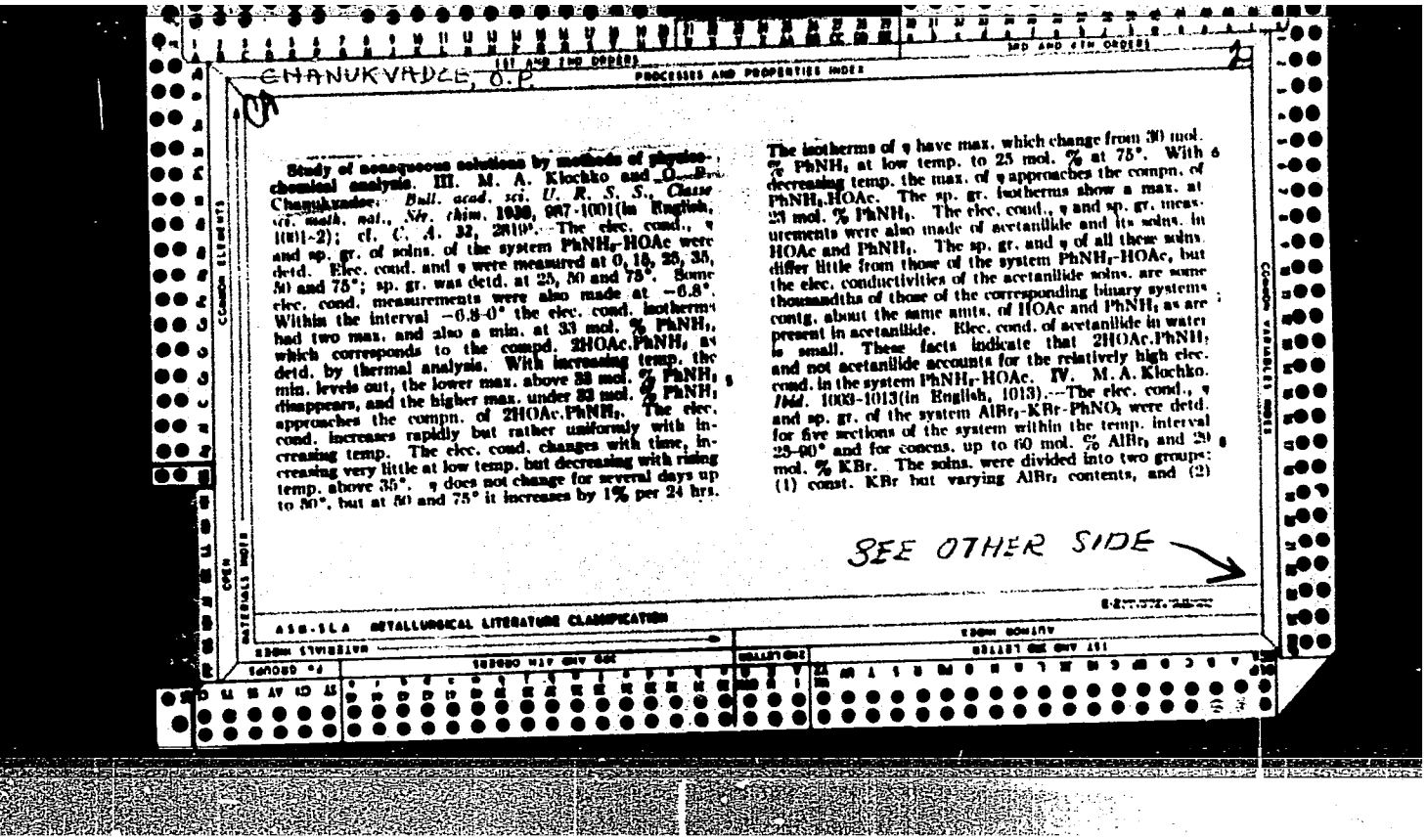
ZELIGER, N. B.;ADIGNATEV,; NAUMOVA, P. A.; CHANTZOY, S. D.
CHANTZOY, S. D.

"Telegraph Foundations," Moscow, The State Publishing of Literature on problems of Communications and Radio, 1950.

ASATIANI, L.G., dotsent; CHARKVADZE, G., red.; KERESELIDZE, U., tekhred.

[Brief multiplication, division, and percent tables] Malye tablitsy vychisleniia protsentov, umnozheniia i deleniia. Izd.2. Tbilisi, Izd-vo M-va torg.GSSR, 1960. 367 p. (MIRA 14:3)

(Mathematics--Tables, etc.)



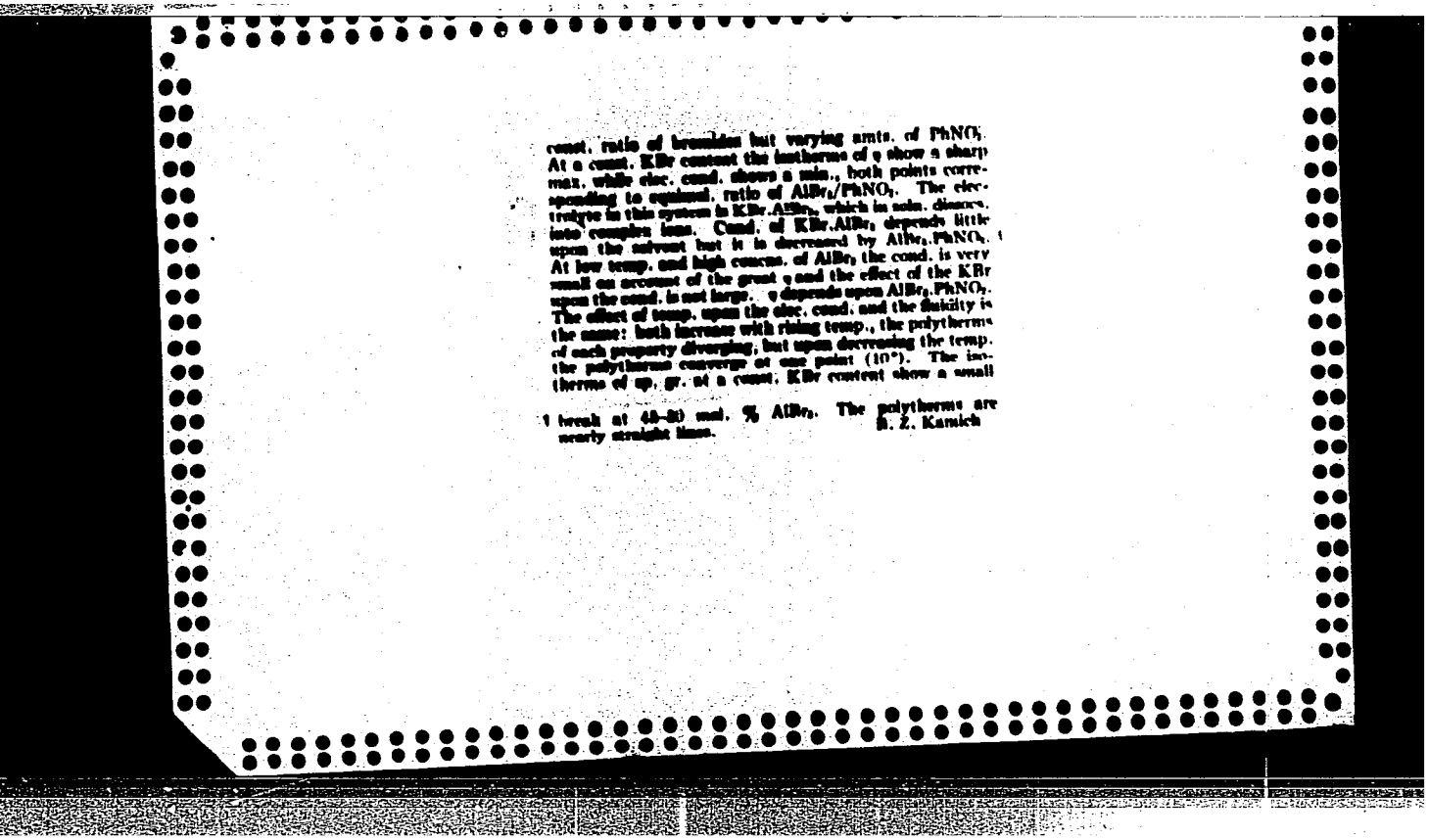
CHANUKVADZE, O.P.

PROCESSES AND PROPERTIES INDEX

Study of nonaqueous solutions by methods of physico-chemical analysis. III. M. A. Klochko and O. P. Chanukvadze. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat., Sér. chim.* 1939, 987-1001(in English, 1001-2); cf. *C. A.* 32, 2819⁹.—The elec. cond., η and sp. gr. of solns. of the system $PhNH_2$-HOAc were detd. Elec. cond. and η were measured at 0, 18, 25, 35, 50 and 75°; sp. gr. was detd. at 25, 50 and 75°. Some elec. cond. measurements were also made at −6.8°. Within the interval −6.8–0° the elec. cond. isotherms had two max. and also a min. at 33 mol. % $PhNH_2$, which corresponds to the compd. 2HOAc.$PhNH_2$ as detd. by thermal analysis. With increasing temp. the min. levels out, the lower max. above 33 mol. % $PhNH_2$ disappears, and the higher max. under 33 mol. % $PhNH_2$ approaches the compn. of 2HOAc.$PhNH_2$. The elec. cond. increases rapidly but rather uniformly with increasing temp. The elec. cond. changes with time, increasing very little at low temp. but decreasing with rising temp. above 35°. η does not change for several days up to 50°, but at 50 and 75° it increases by 1% per 24 hrs. The isotherms of η have max. which change from 30 mol. % $PhNH_2$ at low temp. to 25 mol. % at 75°. With decreasing temp. the max. of η approaches the compn. of $PhNH_2$.HOAc. The sp. gr. isotherms show a max. at 25 mol. % $PhNH_2$. The elec. cond., η and sp. gr. measurements were also made of acetanilide and its solns. in HOAc and $PhNH_2$. The sp. gr. and η of all these solns. differ little from those of the system $PhNH_2$-HOAc, but the elec. conductivities of the acetanilide solns. are some thousandths of those of the corresponding binary systems contg. about the same amts. of HOAc and $PhNH_2$ as are present in acetanilide. Elec. cond. of acetanilide in water is small. These facts indicate that 2HOAc.$PhNH_2$ and not acetanilide accounts for the relatively high elec. cond. in the system $PhNH_2$-HOAc. IV. M. A. Klochko. *Ibid.* 1003-1013(in English, 1013).—The elec. cond., η and sp. gr. of the system $AlBr_3$-KBr-$PhNO_2$ were detd. for five sections of the system within the temp. interval 25–90° and for concns. up to 60 mol. % $AlBr_3$ and 20 mol. % KBr. The solns. were divided into two groups: (1) const. KBr but varying $AlBr_3$ contents, and (2)

SEE OTHER SIDE

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



const. ratio of bromides but varying amts. of $PhNO_2$. At a const. KBr content the isotherms of η show a sharp max. while elec. cond. shows a min., both points corresponding to equimol. ratio of $AlBr_3/PhNO_2$. The electrolyte in this system is $KBr.AlBr_3$, which in soln. dissocs. into complex ions. Cond. of $KBr.AlBr_3$ depends little upon the solvent but it is decreased by $AlBr_3.PhNO_2$. At low temp. and high concns. of $AlBr_3$ the cond. is very small on account of the great η and the effect of the KBr upon the cond. is not large. η depends upon $AlBr_3.PhNO_2$. The effect of temp. upon the elec. cond. and the fluidity is the same: both increase with rising temp., the polytherms of each property diverging, but upon decreasing the temp. the polytherms converge at one point (10°). The isotherms of sp. gr. of a const. KBr content show a small break at 48–50 mol. % $AlBr_3$. The polytherms are nearly straight lines.

B. Z. Kamich

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CHANUKVADZE, O.P.

2

Physicochemical analysis of nonaqueous solutions. V. The binary system aniline-acetic anhydride; melting, electric conductivity, viscosity, and density. M. A. Klochko and O. P. Chanukvadze (N. S. Kurnakov Inst. Gen. Inorg. Chem., Moscow). *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1947, No. 6, 585-90 (in Russian); cf. *C.A.* 40, 6122. — The melting diagram has a max. at 33 mole % ($PhNH_2$), 67°, corresponding to the compd. $Ac_2O.PhNH_2$, which is the anhyd. counterpart of the compd. $2AcOH.PhNH_2$ found in the same way by Pushin and Rikovski (*C.A.* 27, 16); $Ac_2O.PhNH_2$ has a sharper max. and is more stable. There is a eutectic point at [illegible] mole % ($PhNH_2$), −17.0, and possibly also a eutectic very close to Ac_2O. The m. temp. of pure Ac_2O was found somewhat below −68°, not at −73°. The elec. cond. κ at 60° and 75°, is almost nil up to about 30 mole % ($PhNH_2$), where it bends upwards sharply, passing an inflection at about 40 mole % and reaching a max. at 45 and 50 mole % at 60° and 75° temp.; the temp. coeff. of κ has a max. at about 30 mole % ($PhNH_2$); the elec. cond. thus appears to belong to the compd. $Ac_2O.PhNH_2$; at the max., κ = 137 and 187 × 10^{-6} ohm^{-1} cm.$^{-1}$ at 60° and 75° temp. The viscosity η has a sharp max. at 37.5 mole % ($PhNH_2$), η = [illegible] and 3.7 centipoises at 60° and 75° temp.; the temp. coeff. of η has a max. at about 40 mole %. The d. has a max. at about 30 mole %.

N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CHANUKVADZE, O. P.

PA 15T61

USSR/Chemistry - Systems
Chemistry - Nitric acid

Mar 1947

"Electroconductivity and Viscosity of the System Nitric-Acid-Water," O. P. Chanukvadze, 4 pp

"Zhur Obshch Khim" Vol XVII, No 3

Study of electroconductivity, viscosity and specific gravity of the subject system at 0, 10, 20, 30 and 40°.

15T61

CHANUKVADZE, O. P.

USSR/Chemistry - Sysems, Ternary
Chemistry - Conductivity, Electricity

Jan/Feb 1948

"Investigation of Anhydrous Solutions by Physical Chemical Analysis, Part III: Triple System, Aniline - Acetic Anhydride - Water; Fusibility, Conductivity, Viscosity," M. A. Klochko, O. P. Chanukvadze, Inst of Gen and Inorg Chem, Acad Sci USSR, 9 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 1

Describes study of electroconductivity and viscosity at temperatures of 0°-75°, and also of fusibility in triple system, aniline - acetic anhydride - water.

PA 66T36

CHANUKVADZE, ...

PROCESSES AND PROPERTIES INDEX

2

Physicochemical investigations of nonaqueous solutions. VI. The ternary system aniline-acetic anhydride-water; fusion, electric conductivity, viscosity. M. A. Klochko and O. P. Chanukvadze (N. S. Kurnakov Inst. Gen. Inorg. Chem. Acad. Sci. U.S.S.R., Moscow). *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1948, 40-9 (in Russian); cf. *C.A.* 42, 6086i.—Detns. of melting temps. *t*, sp. elec. cond. κ, viscosity η, and of d. were made, for the primary system (I) Ac_2O-$(PhNH_2)_2$-H_2O, along the 6 sections of const. H_2O (mole %): (1) 21.0, (2) 33.4, (3) 50.0, (4) 57.1, (5) 70.0, and (6) 81.8; sections 1 and 2 correspond, in the secondary system (II) Ac_2O-$(AcOH)_2$-$(PhNH_2)_2$, to 26.6 and 50.0 mole % $(AcOH)_2$, resp., sections 4, 5, and 6, in the secondary system (III) $(AcOH)_2$-$(PhNH_2)_2$-H_2O, to 25.0, 57.1, and 77.2 mole % H_2O, resp. (1) In the triangular diagram II, the maxima of *t* correspond, on all sections, to 33.3 mole % $(PhNH_2)_2$ and lie on the straight line running from $2Ac_2O.(PhNH_2)_2$ to $2(AcOH)_2.(PhNH_2)_2$. A 2nd singular secant runs from $(AcOH)_2$ to $2Ac_2O.(PhNH_2)_2$, these being the most stable products in the system. Eutectic points are (1) −17.3°, 6.30 mole % $(PhNH_2)_2$ and −23.0°, 88.73; (2) −8.0°, 3.22, and −25.5°, 80.37. Eutectic lines are drawn tentatively. (2) The 0, 15, 25, 35, 50, and 75° isotherms of κ for section 4, against mole % $(PhNH_2)_2$, show maxima and inflections, the latter tending to go over into minima at lower temps. and to disappear at highest temps. On the ternary projection (I), the line of max. κ runs from close to $2Ac_2O.(PhNH_2)_2$, first in the general direction of the H_2O corner, but then deviates markedly towards the $(AcOH)_2$-H_2O side in the 2nd half of the triangle (that corresponding to III). Highest values of κ are shown in the region close to the H_2O corner. The isotherms of η (section 4) have max., the higher the lower the temp.; equally, the trend of change of η with the compn. is reversed with regard to κ. As the decrease of η with rising temp. is greater than the increase of κ, the product κη decreases. The elec. cond. of the system is detd. by the compd. between Ac_2O and $PhNH_2$, and decreases with its increasing dissocn. The effect of H_2O on both κ and on η is the same as that of the temp.

N. Thon

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CHANUKVADZE, O., (P)

Chanukvadze, O., - "An investigation of cencentrated water solutions by methods of physico-chemical analysis," Trudy Tbilis. gos. un-ta im. Stalina, Vol. XXXIa, 1948, p. 17-28, - Bibliog: p. 28

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949

L 52629-65 EWP(e)/EWT(m)/EWP(i)/EWP(t)/EWP(b)/EWA(h) Pq-4/Peb DIAAP/LJP(c)
JD/GS/WH

ACCESSION NR: AT5012705 UR/0000/64/000/000/0091/0093

AUTHOR: Lobanov, Ye. M.; Chanyshev, A. I.; Dutov, A. G.; Khudayberganov, A.; Ashirov, M. G.

TITLE: Determination of impurities in boron and in quartz crystals by means of neutron activation analysis

SOURCE: Vsesoyuznoye koordinatsionnoye soveshchaniye po aktivatsionnomu analizu. 1st, Tashkent, 1962. Trudy. Tashkent, Izd-vo Nauka UzSSR, 1964, 91-93

TOPIC TAGS: activation analysis, neutron bombardment, boron analysis, quartz analysis, gamma spectrometer

ABSTRACT: The article describes a γ-spectrum variant of the activation analysis of boron and quartz crystals withoug their chemical decomposition. After irradiation in the thermal column of a reactor, the γ spectra of the samples were recorded with a multichannel scintillation gamma-spectrometer. The impurities being determined were identified directly by means of the energies of the γ lines observed in the spectrum. The amounts of Cu, Mn, and Na present in boron were determined; the values obtained were multiplied by a correction factor of 6, which was required because boron absorbs neutrons strongly and their flux in the bulk of the sample is much weaker than at its surface. In

Card 1/2

L 52629-65
ACCESSION NR: AT5012705

quartz crystals, the following impurities were determined: Na, Al, Co, Fe (synthetic quartz) and Na, Al Sb (natural varieties). Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Institut yadernoy fizki AN UzSSR (Institute of Nuclear Physics, An UzSSR)

SUBMITTED: 02 Dec. 64 ENCL: 00 SUB CODE: IC, NP

NO REF SOV: 000 OTHER: 000

Card 2/2

CHANYSHEV, A.Kh., prepodavatel'; VUL'FOV, B.Z., prepodavatel'.

Industrial training practice of students of School No.544 of Moscow at the Vladimir Il'ich Factory. Politekh. obuch. no.4:13-17 Ap '58. (MIRA 11:3)

1. Srednyaya shkola No.544, Moskva.
(Education, Cooperative)

MUMZHIYEV, V.; CHANYSHEV, M.

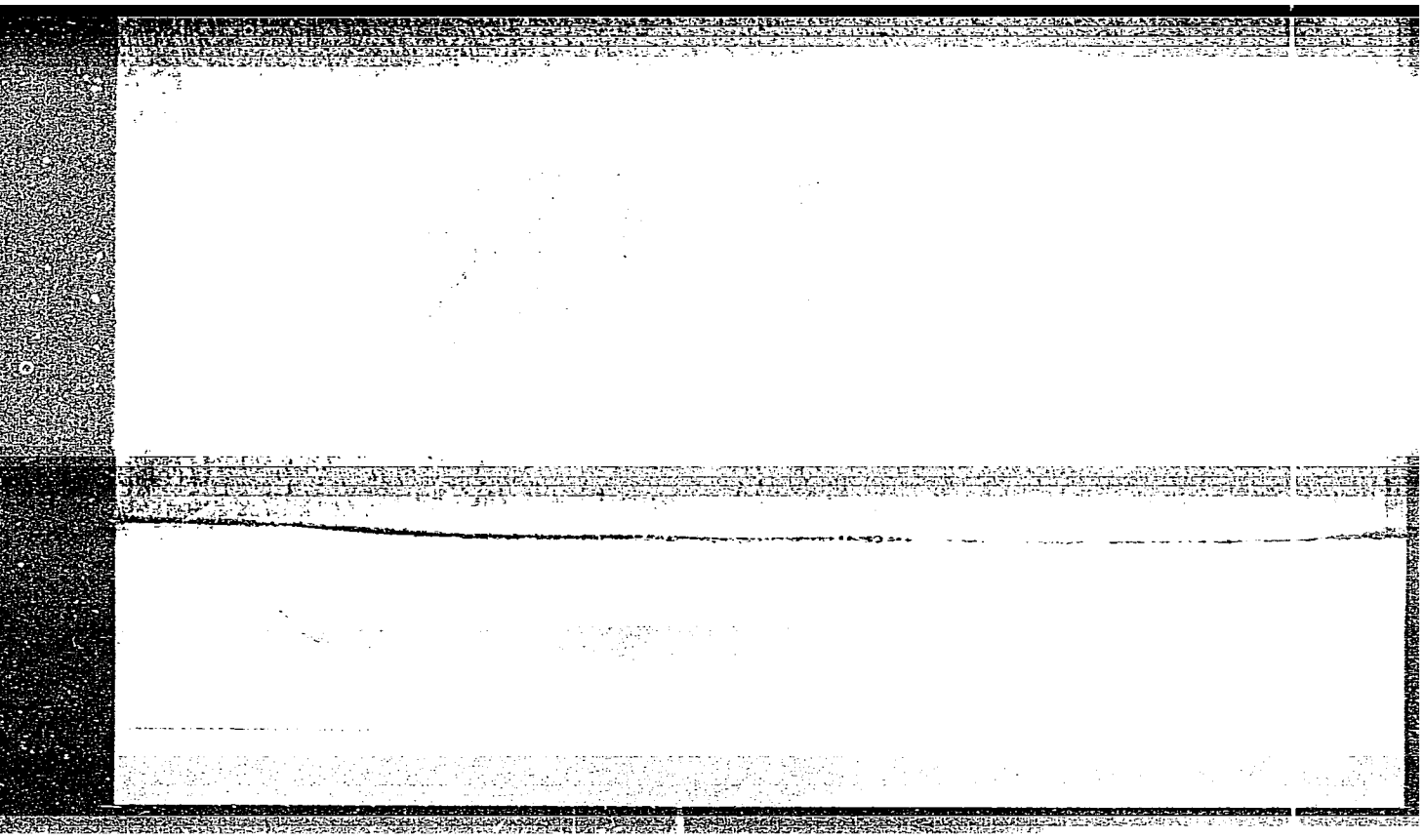
Improving working procedures. Tekh. v sel'khoz. 20 no.6:15-18 Je '60. (MIRA 13:10)

1. Predsedatel' kolkhoza "Put' k kommunizmu," Komratskogo rayona, Moldavskoy SSR (for Mumzhiyev). 2. Glavnyy agronom kolkhoza "Put' k kommunizmu," Komratskogo rayona, Moldavskoy SSR (for Chanyshev). (Komrat District--Corn (Maize))

CHAMYSHEV, M.I.

Using the steam impact method in manufacturing particle boards. Der.prom. 9 no.5:17-18 My '60. (MIRA 13:7)

(Hardboard)



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000308120015-1"

CHANYSHEV, R.

Using two-phase milking machines. Nauka i perod.op.v sel'khoz. 9 no.11:62 N '59. (MIRA 13:3)

1. Glavnyy inshener sovkhoza "Metallist," Stalinskoy oblasti.
(Milking machines)

CHANYSHEV, R.O.

Our experience in using two-phase milking machines. Mekh. sil' hosp. 10 no.4:18 Ap '59. (MIRA 12:6)

1.Glavnyy inzhener sovkhoza "Metallist," Stalinskoy oblasti.
(Milking machines)

CHANISHEV, R.O. [Chanyshev, R.O.]

For better organized maintenance of agricultural machinery and tractors. Mekh.sil'.hosp. 10 no.7:15-17 Jl '59. (MIRA 12:12)

1. Glavnyy inzhener sovkhoza "Metallist," Stalinskoy oblasti. (Agricultural machinery--Maintenance and repair)

CHANYSHEV, R.O., insh.

Organising the maintenance of agricultural machinery and tractors. Mekh.i elek.sots.sel'khoz. 17:18 '59.
(MIRA 12:12)

1. Sovkhoz "Metallist" Stalinskoy oblasti.
(Agricultural machinery--Maintenance and repair)
(Tractors--Maintenance and repair)

CHANYSHEV, R.O.; GONCHAROV, L.T. [Goncharov, L.T.], inzh.-elektrik

Experience in using electric water heaters. Mekh.sil'.hosp. 11 no.2:23-24 F '60. (MIRA 13:6)

1. Glavnyy inzhener sovkhoza "Metalist" (for Chanishev).
(Water heaters)

CHANYSHEV, R.O.

Introducing mechanization on livestock farms. Mekh. sil'. hosp. 11 no.5:4-5 My '60. (MIRA 14:3)

1. Glavnyy inzhener sovkhoza "Metalist", Stalinskoy oblasti. (Farm mechanization) (Stock and stockbreeding)

CHANYSHEV, R.

Mechanization of livestock sections on the "Metallist" State Farm. Tekh. v sel'khoz. 20 no.7:29-31 Jl '60.
(MIRA 13:9)

1. Glavnyy inzhener sovkhoza "Metallist", Stalinskoy oblasti.
(Stalino Province--Farm mechanization)

84596

S/181/60/002/010/018/051
B019/B056

9.4177

AUTHORS: Chanyshev, S. I. and Zgayevskiy, V. E.

TITLE: The Problem of the Temperature Dependence of the Chemical Potential of a Semiconductor

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2461-2462

TEXT: In the introduction, the finding of the temperature dependence of the chemical potential of a semiconductor is discussed, when the neutrality condition is assumed to be satisfied. Usually the temperature dependence of the forbidden band width is not taken into account. Here, $\Delta E(T) = \Delta E(0) - \beta T$ (1) is given for the forbidden band width as temperature function, where β must be determined by electrical or optical methods. The authors calculated the temperature dependence of the chemical potential of InSb on the basis of data obtained by Oswald (Ref. 4). The results showed the importance of taking the temperature dependence of the forbidden band width into account. Calculations were carried out for

Card 1/2

84596

The Problem of the Temperature Dependence of the Chemical Potential of a Semiconductor

S/181/60/002/010/018/051
B019/B056

ΔE = 0.24 ev and $\beta = 2.6 \cdot 10^{-4}$ ev/deg taking into consideration the surface zone. The results are graphically represented in Fig. 1. It was shown that consideration of the temperature dependence of the forbidden band width becomes necessary first at about 300°K. It was found that consideration of the temperature dependence of the forbidden band width becomes necessary earlier than taking account of the degeneracy and the surface states. There are 1 figure and 5 references: 3 Soviet and 2 German.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut Tomsk (Siberian Institute of Physics and Technology, Tomsk)

SUBMITTED: October 21, 1959

Card 2/2

CHANYSHEV, S. M.

Chanyshev, S. M. "The dependence of the elasticity moduli of cubic crystalline grids on temperature," Trudy Sib. Fiz.-tekhn in-ta, Issue 26 1948, p. 89-103, - Bibliog 6 items

SO: U-5241, 17 December 1953, (Letopis' Zhurnal 'nykh Statey, No. 26, 1949)

SOV/139-58-4-21/30

AUTHORS: Chanyshev, S. M. and Zgayevskiy, V. E.

TITLE: Temperature Dependence of Chemical Potential
(O temperaturnoy zavisimosti khimicheskogo potentsiala)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1958, Nr 4, pp 127-134 (USSR)

ABSTRACT: The behaviour of chemical potential with temperature is evaluated theoretically with special reference to indium antimonide (InSb). The chemical potential is related to the surface density of electrons by:

$$n_{SURF} = \frac{4\pi k T m}{h^2 f_n} \ln \left[1 + \exp (\mu'^* - E_1^*)\right]$$

Here f_n is the excitation function for the nth zone, E_1^* is a 'reduced' excitation energy, related to the true excitation energy by:

$$E_1^* = E_1/kT$$

also $\mu'^* = \mu'/kT$

where μ' is the excess of the chemical potential over the (known) surface function u_o, thus:

$$\mu'(T) = \mu(T) - u_o(T)$$

All other symbols have their standard meanings. In principle, then, the problem is to enumerate the number of electrons in the surface band. The balance of electrons between various bands at any given temperature is represented by:

$$(N_D - N_L) + N_R = (N_a - N_L') + N_p + N_{SURF}$$

where: $N_D - N_L$ is the number of positive holes in the donor band;
N_R is the number of positive holes in the fundamental band;
$N_a - N_L'$ is the number of electrons in the acceptor band;
N_{SURF} is the number of electrons in the surface band;
N_p is the number of electrons in the conduction band.

SOV/139-58-4-21/30

Temperature Dependence of Chemical Potential

All electrons and positive holes obey accurately the Fermi law, although this may - and does at high temperatures - prove an unnecessary refinement over the Maxwell law. Using, then, the Fermi (or Maxwell) law the distribution of electrons between the various bands is readily evaluated as a function of temperature, and this leads immediately to N_{SURF}, and hence the chemical potential. The quantity μ'^* is plotted against T for various-sized InSb crystals: it varies from $-\infty$ at $0^\circ K$ to small positive values (< 5) at $1500^\circ K$; for a given temperature μ'^* decreases with the crystal dimension. Since the number of conduction electrons is evaluated in the course of the calculation an incidental result of this work is to relate the chemical potential to the electrical conductivity. There are 7 figures and 8 references, 5 of which are Soviet, 3 English.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuybysheva
(Siberian Physico-Technical Institute of Tomsk State University)

Card3/4

CHANYSHEV T. M.

AID P - 3702

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 7/25

Author : Chanyshev, T. M., Eng.

Title : Rebuilding of slide valve drives

Periodical : Energetik, 12, 13-14, D 1955

Abstract : The author describes the work done in the boiler room of a power station in remodeling slide valve drives installed on pipes leading to deaerators. One drawing.

Institution : None

Submitted : No date

CHANYSHEV, Z.G.

Propolis in the treatment of foot-and-mouth disease. Veterinariia 40 no.8:19-21 Ag '63. (MIRA 17:10)

1.Bashkirskaya nauchno-proizvodstvennaya veterinarnaya laboratoriya.

GAVRILOV, G.A.; CHANYSHEVA, I.S.

Studying the molecular interaction of nitrobenzene with dihydroxybenzenes and aniline by means of the electron absorption spectrum. Izv.vys.ucheb.zav.;fiz. no.2:210-216 '60. (MIRA 13:8)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete im. V.V. Kuybysheva.
(Benzene) (Aniline)

COUNTRY : USSR
CATEGORY : GENERAL&SPEC.ZOOLOGY.INSECTS

P

ABS. JOUR.: Ref Zhur -Biologiya, No. 4, 1959, No. 16274

Author : Chanysheva, Kh.
INST. :
TITLE : The Grain Moth and Measures to Combat It.

ORIG. PUB.: S. kh. Bashkirii, 1958, No.5, 43-45

ABSTRACT : No abstract.

CARD : 1/1

ACC NR: AT6036652 SOURCE CODE: UR/0000/66/000/000/0278/0279

AUTHOR: Mershchikov, A. G.; Aleshin, I. A.; Chanysheva, R. B.

ORG: none

TITLE: Shifts in the structure of the systolic portion of phono- and ballistocardiograms with changes in respiration resistance [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 278-279

TOPIC TAGS: ballistocardiography, phonocardiography, human physiology

ABSTRACT: The effect of increased respiration resistance on the systolic portions of phono- and ballistocardiograms (containing information on cardiac pumping function, which is closely related to respiration) was studied in healthy human subjects who were unaccustomed to the studied conditions. Phonocardiogram, electrocardiogram, and ballistocardiogram indices were recorded before and during exposure to increased repiratory resistance.

Increased respiratory resistance produced a phonocardiogram with changed duration of segments and intervals and some changes in the number of oscillations and the frequency characteristic of the first heart sound.

Card 1/2

ACC NR: AT6036652

The largest wave shifted its position, and the amplitude ratio of acoustic waves entering into the main segment of the first heart sound changed. Taken together, these changes point to differences in the tension phase and in initial phase of systolic ejection, and possible nonuniform phase variation in the right and left ventricles.

In the ballistocardiograms, increased respiration resistance produced changes in the duration of intervals, amplitudes, amplitude ratios, and ballistic coefficients. The H-K time was shortened by shortening of the tension phase and/or ventricular ejection phase. In most cases, JK increased. This increase is made possible by decrease in the inspiratory and (mainly) expiratory IJ amplitudes. The range of respiratory variations (RVI) in the activity state of the heart increases.

Phonocardiograph and ballistocardiograph data show that changes in cardiac pumping function during respiratory resistance include not only changes in the force and rhythm of cardiac contractions, but changes in the structure of the cardiac cycle itself as well.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

ACCESSION NR: AT4012399 S/2648/63/000/015/0034/0040

AUTHOR: Chany*sheva, S. G.

TITLE: The wind pattern over the Kum-Bel' Mountain Pass

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy*, no. 15, 1963, 34-40

TOPIC TAGS: meteorology, wind, mountain pass, valley, wind pattern, weather balloon

ABSTRACT: Balloon observations over Kum-Bel' in August 1961 yielded interesting data on wind directions at various altitudes at different times of the day. In daytime, western winds prevail; at night, eastern and southern winds. Analysis of these observations indicates six basic stages of wind development over Kum-Bel': (1) Replacement of mountain winds by valley winds in the neighborhood of a mountain pass. One valley is being warmed by the sun, while the other is still in shadow; the mountain wind over the pass weakens considerably, and calm layers appear. (2) Interaction of valley winds in the neighborhood of a mountain pass. Both valleys are being warmed by the sun, but unequally. The wind from the left valley (Katta-Shir) penetrates into the upper regions of the right valley (Alty*-Kol). The

Card 1/3

ACCESSION NR: AT4012399

wind from the right valley diminishes at the bottom, but persists over the mountain pass and over the left valley. (3) Constant winds from the left valley in the neighborhood of the pass. Both valleys are being warmed uniformly. The stronger wind from the left valley penetrates into the upper regions of the right valley. There are ascending currents over the layer of the valley wind. (4) Weakening of valley winds. The left valley is being warmed much more than the right one. The wind of the left valley continues to penetrate into the upper regions of the right valley, but a counterflow system appears over the right valley. (5) Stabilization of the mountain wind in the neighborhood of the pass. Only the left valley is warmed. Calm layers appear with the beginning of the mountain wind. (6) Mountain wind in the neighborhood of the pass; there is no heating. General radiational cooling takes place, with precipitation from the free atmosphere and divergence near the surface of the earth. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Tashkent (Central Asian Scientific Research Institute for Hydrometeorology)

Card 2/3

ACCESSION NR: AT4012399

SUBMITTED: 00 DATE ACQ: 20Feb64 ENCL: 00

SUB CODE: ES NO REF SOV: 002 OTHER: 002

Card 3/3

ROMANOV, N.N.; CHANYSHEVA, S.G.

Brief characteristics of aerosynoptic conditions during the period of the expedition to the Golodnaya Steppe in February - March 1957. Trudy Sred.-Az.nauch.-issl.gidrometeor.inst. no.2:17-25 '59. (MIRA 13:6)

(Golodnaya Steppe--Winds)
(Soviet Central Asia--Meteorology)

CHANYSHEVA, S.G.

Aerological characteristics of the Ursat'yevskaya winds. Trudy Sred.-Az.nauch.-issl.gidrometeor.inst. no.2:26-40 '59. (MIRA 13:6)
(Golodnaya Steppe--Winds)

CHANYSHEVA, S.G.

Some aerometeorological characteristics observed during periods of the Ursat'yevskaya winds. Trudy Sred.-Az. nauch.-issl. gidrometeor. inst. no.4:29-43 '61. (MIRA 15:1)
(Ursat'yevskaya region--Winds)

CHANYSHEVA, S.G.

Vertical air motions during the Ursat'yevskaya winds. Trudy Sred.-Az. nauch.-issl. gidrometeor. inst. no.4:44-49 '61.
(MIRA 15:1)

(Ursat'yevskaya region--Winds)

PETROSYANTS, M.A.; CHANYSHEVA, S.G.

Some characteristics of the mountain-valley circulation.
Meteor.i.gidrol. no.9:3-10 S '63. (MIRA 16:10)

1. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut.

ACCESSION NR: AT4012398 S/2648/63/000/015/0026/0033

AUTHOR: Chany*sheva, S. G.

TITLE: The nature of the north-east winds of the Angren Valley

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy*, no. 15, 1963, 26-33

TOPIC TAGS: meteorology, wind, mountain wind, valley wind, mountain valley circulation, radiation balance, wind profile, foehn, wind velocity

ABSTRACT: The Angren valley provides a classical example of a mountain-valley circulation. During the winter months the valley wind blows only a short time in the daytime, and mostly there is no wind at all. This is explained by the short duration of a positive radiation balance in winter, resulting in the warming of the cold air descending from mountains. The N. E. wind sometimes lasts for several days and attains considerable velocity (up to 17 m/sec). The recurrence rate of such N. E. wind is quite high. For the study of the vertical structure of N. E. winds, only those periods have been considered in which this wind

Card 1/3

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attained the velocity of 5 m/sec and did not belong to the mountain-valley circulation. In 11 years, 156 such periods occurred. The maximum recurrence of winds with the above-mentioned velocities is seen in winter, and such winds last for 2—2-1/2 days. Three basic types of wind are considered: (1) Winds decreasing in velocity with an increase in height; (2) Winds increasing in velocity up to a certain altitude, and then slowing down; (3) Winds with two velocity maxima. Maximum wind velocities can attain 20 and even 30 m/sec. During the duration of N.E. winds, the Angren valley meteorological stations observe an intensive lowering of pressure and relative humidity, and a rise in temperature. Warming up does not exceed 10C, and occurs gradually. It is not caused exclusively by the foehn effect, and occurs with considerable heat advection. However, several facts prove the existence of the warming foehn effect. To determine the adiabaticity of the warming process in the Angren valley, the average difference between average daily temperatures (9.8C) was calculated. This difference equals the dry adiabatic gradient. Present observations confirmed the opinion of many experts that a foehn must have a mountain-valley temperature gradient of not less than 7C for 1000 m. To show the significance of the foehn as a climatic factor, a map of average January temperatures was applied adiabatically to the Angren Plateau. It shows a considerable rise in temperature in the direction of the upper part of the valley. The Angren wind, however, is only an anticyclonic stage of the foehn process. The resulting effect of the outflow of the air from all valleys opening to the West should probably

Card 2/3

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cause a considerable air descent over the Uzbekistan mountainous regions, particularly at the time of Caspian cyclones. This influences the temperature pattern up to high altitudes. Orig. art. has: 3 figures and 7 tables.

ASSOCIATION: Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Tashkent (Central Asian Scientific Research Institute for Hydrometeorology)

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Card 2/2

ACCESSION NR: AT4012400 S/2648/63/000/015/0041/0047

AUTHOR: Gerasina, S.A.; Petrosyants, M.A.; Romanov, N.N.; Chany*sheva, S.G.

TITLE: The interaction of mountain-valley circulations of two valleys separated by a mountain pass

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy*, no. 15, 1963, 41-47

TOPIC TAGS: meteorology, wind, mountain wind, valley wind, mountain valley circulation, atmospheric turbulence, foehn, air current

ABSTRACT: In August and September of 1955, an expedition was sent to the Talass and Susamy*r valleys by the Institut matematiki i mekhaniki AN UzbSSR (Institute of Mathematics and Mechanics) and the Tashkentskaya nauchno-issledovatel'skaya geofizicheskaya observatoriya (Tashkent Scientific Research Geophysics Observatory) to study the mountain-valley circulation and the air currents over mountainous regions. Four observation points were situated in the Talass valley, and one in the Susamy*r valley. Along with visual observations, observations were made by means of balloons and metereological instruments, and at

Card 1/4

ACCESSION NR: AT4012400

two points, radio-sounding was utilized. Both valleys are situated in the western Tian-Shan and run more or less from East to West. The Talass valley is longer, wider and deeper than the Susamy*r valley. The observations proved that at night and during the morning hours, there are autonomous and completely independent circulations untouched by synoptic processes in the upper parts of both valleys. Mountain winds appear around 10 P. M., and between 8-10 A. M. are replaced by valley winds. At 10 A. M. or sometimes at noon, there is practically no interaction of mountain-valley circulations in the upper parts of the valleys. In the Talass valley, mountain winds blow at night and in the morning while valley winds blow all day long. From noon at 2 P. M. the flow from the Talass valley is not strong enough to send air to the Susamy*r valley. After noon the valley circulation of the upper regions of the Susamy*r is replaced by western and S. W. winds. These are called mountain-pass winds and have their own peculiarities. They appear at a certain altitude and then drop to earth; between noon and 2 P. M. they blow over the very bottom of the valley. The mountain-pass wind has more force and intensity than the valley wind, and has a gusty structure. It attains maximum velocities between 2 and 6 P. M. and disappears after 10 P. M. The nature of these winds can be explained by the following facts: (1) Since the Talass valley is considerably longer and wider than the Susamy*r valley, the valley-winds of the former should be much

Card 2/4

stronger. The mass of air of the valley circulation is much greater than in the Susamy*r valley. Therefore, the kinetic energy of the winds of the Talass valley is greater than in the Susamy*r valley. (2) The velocities of the mountain-pass wind are greater than those of the Talass valley wind at a comparable altitude. This is, apparently, the result of the fact that the Talass valley mountain-pass winds are forced to flow through sections having smaller surfaces. (3) The velocities of the mountain-pass winds increase later in the day. At the same time, the valley-winds of the Talass valley attain their maximum strength. It is possible that during the day the convection, especially above the mountains, is the greatest. Therefore, the free atmospheric flow is transferred from the upper levels of the convection to the lower levels. The direction of the mountain-pass wind often coincides with the direction of the dominant wind of the free atmosphere. (4) According to visual observations, the part of the Talass ridge which divides both valleys is, in daytime, almost always covered by convective clouds. It is natural that this cloudiness should be increased by ascending Talass valley-winds and, in consequence, a more or less distinct foehn effect in the upper part of the Susamy*r valley can be expected. (5) Vertical currents are also responsible for the existence of mountain-pass winds which play an important role in the transfer of turbidity from lower regions to mountainous terrains. Orig. art. has: 1 figure and 2 tables.

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Card 4/4

PETROSYANTS, M.A.; SUBBOTINA, O.I.; CHANYSHEVA, S.G.

Influence of the orography of Central Asia on the mean temperature field. Trudy Sred.-Az. nauch.-issl. gidrometeor. inst. no.20:158-171 '65. (MIRA 18:10)

PETROSYANTS, M.A.; CHANTSEVA, S.G.

Experience in calculating vertical air motions over a mountain range. Trudy Sred.-Az. nauch.-issl. gidrometeor. no.23:88-92 '65. (MIRA 19:2)

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ACC NR: AR6016947 SOURCE CODE: UR/0169/65/000/012/B024/B024

AUTHOR: Petrosyants, M.A.; Subbotina, O. I.; Chasysheva, S. G. 13

TITLE: The influence of Central Asia orography upon the average temperature 12 field

SOURCE: Ref. zh. Geofizika, Abs. 12B163

REF SOURCE: Tr. Sredneaz. n.-i. gidrometeorol. in-ta, vyp. 20(35), 1965, 158-171

TOPIC TAGS: atmospheric temperature, orography ~~temperature influence~~/ Central Asia ~~atmospheric temperature~~

ABSTRACT: The influence of Central Asia orography upon the average temperature field at various seasons was studied by comparing the average meridional and latitudinal vertical sections of the temperature field for Jan., Apr., Jul. and Oct. 1960-1963 (the crossections of temperature differences over mountains and over plains rather than the actual temperature field are presented). It is necessary to distinguish between large scale influence of the mountain systems upon the temp. field, and the local influences. In the summer, the mountain systems are large scale heat sources and therefore the temp. over the mountains up to a height of 5 - 6 km (1-2 km higher than the ridge level) is warmer than over the plains. Higher, due to the dynamic influence of the mountain systems creating a predominance of ascending currents, the atmosphere over the mountains is cooler. In the winter the mountain systems represent large scale cold sources, but the radiational cooling does not extend to great height and the temp. over mountains is close to the air temperature over the plains. The dy-

Card 1/2 UDC 551.524.551.43